(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 28 April 2005 (28.04.2005)

PCT

(10) International Publication Number WO 2005/038288 A1

(51) International Patent Classification⁷: 9/19, 9/44, 15/02

F16F 7/104,

(21) International Application Number:

PCT/FI2004/050147

(22) International Filing Date: 12 October 2004 (12.10.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 20031531

20 October 2003 (20.10.2003) F

- (71) Applicant (for all designated States except US): WÄRT-SILÄ FINLAND OY [FI/FI]; Tarhaajantie 2, FI-65380 Vaasa (FI).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): MIKONAHO, Heikki [FI/FI]; Muntionkatu 12, FI-20740 Turku (FI).
- (74) Agent: AWEK INDUSTRIAL PATENTS LTD OY; PL 230, FI-00101 Helsinki (FI).

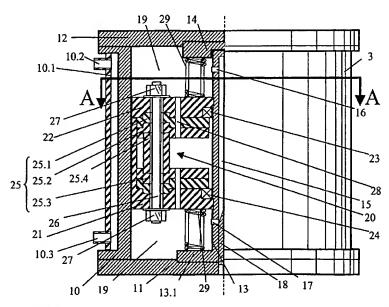
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: VIBRATION DAMPER, A METHOD OF PRODUCING A VIBRATION DAMPER AND A DAMPENING ARRANGEMENT FOR DAMPENING THE VIBRATIONS OF AN ENGINE



(57) Abstract: A vibration damper (3), comprising a body part (10), via which the damper can be fastened to the object to be dampened, an oscillating piece (20) movably arranged in the space (19) of the body part (10) and fastened by at least one spring (29) to the body part, the oscillating piece (20) consisting of more than one part (21, 22, 23, 24, 25, 26, 27), removably fastened to each other. The invention also relates to a method of producing a vibration damper (3) and an arrangement of reducing the vibration in a piston engine.